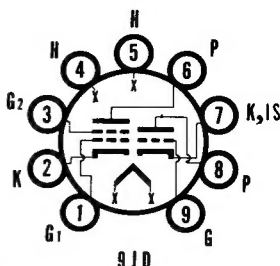


SYLVANIA TYPE 12DY8



MECHANICAL DATA

Bulb.....	T-6 1/2
Base.....	E9-1, Miniature Button 9-Pin
Outline.....	6-2
Basing.....	9JD
Cathode.....	Coated Unipotential
Mounting Position.....	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage ¹	12.6 Volts
Heater Current.....	350 Ma
Maximum Heater-Cathode Voltage.....	16 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

	Triode Section	Tetrode Section
Grid to Plate.....	1.5	0.74 μmf
Input.....	2.0	11 μmf
Output.....	2.0	3.0 μmf

MAXIMUM RATINGS (Design-Maximum Values)²

	Triode Section	Tetrode Section
Plate Voltage.....	16	16 Volts
Grid No. 2 Voltage.....	..	16 Volts
Grid No. 1 Resistance.....	10	10 Megohms

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Tetrode Section
Plate Voltage.....	12.6	12.6 Volts
Grid No. 2 Voltage.....	..	12.6 Volts
Grid No. 1 Voltage.....	0	(Note 3) Volts
Grid No. 1 Resistor.....	..	2.2 Megohms
Plate Current.....	1.2	14 Ma
Grid No. 2 Current.....	..	2 Ma
Transconductance.....	2000	6000 μmhos
Amplification Factor.....	20	..
Plate Resistance (approx.).....	10,000	5000 Ohms
E_c for $I_b = 10 \mu\text{Adc}$ (approx.).....	-2.0	Volts
E_c for $I_b = 20 \mu\text{Adc}$ (approx.).....	..	-9.0 Volts

TYPICAL OPERATION

Tetrode Section—Relay Service

Heater Voltage.....	10.0	15.0 Volts
Plate Supply Voltage.....	10.0	15.0 Volts
Grid No. 2 Voltage.....	10.0	15.0 Volts
Grid No. 1 Voltage.....	(Note 3)	-6.0 Volts
Grid No. 1 Resistor.....	10	0 Megohms
Plate Load Resistor.....	700	700 Ohms
Plate Current.....	5.0 Min.	3.0 Ma Max.

NOTES:

1. This tube is intended to be used in automotive service from a nominal 12 volt battery source. The heater is therefore designed to operate over the 10.0 to 15.9 voltage range encountered in this service. The maximum ratings of the tube provide for an adequate safety factor such that the tube will withstand the wide variation in supply voltages.
2. Design-Maximum Ratings are limiting values of operating and environmental conditions applicable to a bogey electron device of a specified type as defined by its published data, and should not be exceeded under the worst probable conditions.
The device manufacturer chooses these values to provide acceptable serviceability of the device, taking responsibility for the effects of changes in operating conditions due to variations in device characteristics.
The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bogey device under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, and environmental conditions.
3. Contact potential bias developed across specified grid resistor.

APPLICATION

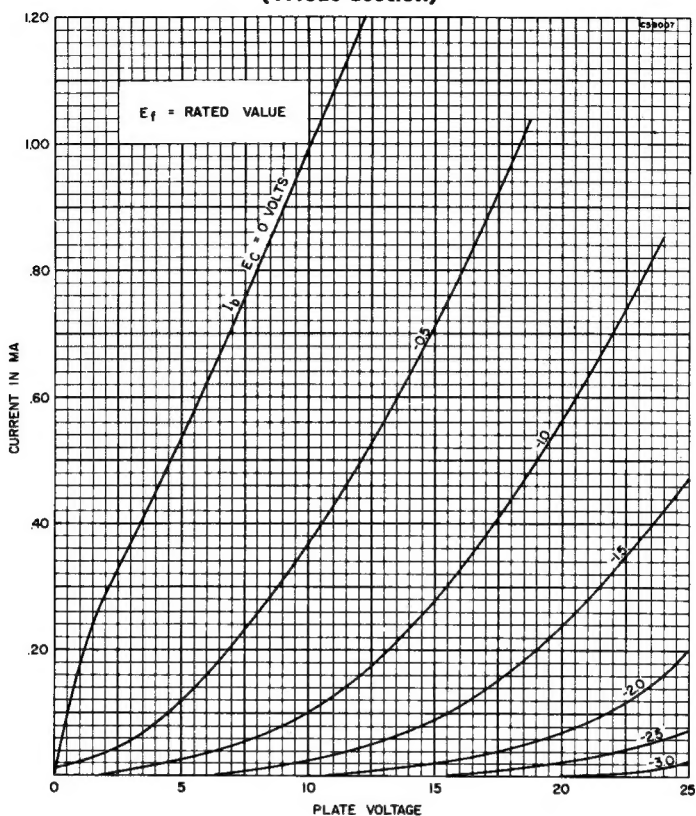
The Sylvania Type 12DY8 is a double section tube featuring a tetrode which is designed and controlled for relay service in "signal-seeker" applications; and a general purpose sharp-cutoff triode.

The 12DY8 is intended for operation where the heater, plate and screen voltages are obtained directly from a 12-volt automotive electrical system.

SYLVANIA ELECTRONIC TUBES

SYLVANIA TYPE 12DY8 (Cont'd)

AVERAGE PLATE CHARACTERISTICS (Triode Section)



AVERAGE PLATE CHARACTERISTICS (Tetrode Section)

